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## **OPTIMIZATION OF SOWING METHODS AND SOWING RATES IN MILLET SOWINGS**

The results of experimental researches and the experience of manufacturers indicate that dense and sparse sowings are unproductive.

As a result of three-year researches was established that maximum realization of productivity potential provided lower-case sowing with sowing rate of at least 4.0 million pieces of similar seeds per ha. Due to such seeding parameters, one-stalk coenosis of maternal millet plants, they are placed in the areas with the least competition on nutrition elements, moisture and light. Deviations from the recommended in production sowing rates in each of the studied methods of sowing, cause the reduction of the yield level. The biggest shortfall in seed yield caused the deficit of seed material, compared to its overspent. A similar trend according to the reduction of yield level, can be traced also to sowing method – with increase of row spacing from 15 to 45 cm, level of this indicator in maternal plants is also significantly reduced. The maximum reproduction factor provided the wide-row sowing to 45 cm with the seeding rate of 1.5 million pcs. of similar seeds per ha. Within a particular sowing method, overspent of seed material during sowing higher than recommended rates on 0.5 million pcs. entailed a significant reduction of the indicator level; reduction of seeding rates by 0.5 and 1.0 million pcs. of similar seeds, although it caused a significant shortfall of yield level, but significantly increased its rate of reproduction.

**Key words:** millet, sowing, method of sowing, sowing rate, yield.